

Docket No. 500.43486X00
Serial No. 10/772,386
Office Action dated April 5, 2007

REMARKS

I. Introduction

By the present Amendment, claims 1 and 24 have been amended, and claim 5 canceled. Accordingly, claims 1, 3, 6-12, 14-21, and 24 remain pending in the application. Claims 1, 9, 16, 21, and 24 are independent.

II. Office Action Summary

In the Office Action of April 5, 2007, claims 1, 3, 5, 6, 11, 14, and 24 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 6,311,819 issued to Stromme et al. ("Stromme") in view of U.S. Patent No. 4,015,703 issued to Keller. Claim 12 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 4,993,700 issued to Winkler. Claim 10 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 4,837,064 issued to Tschudin-Mahrer. Claims 17-20 were rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 3,966,047 issued to Steiner. Claim 21 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 5,486,063 issued to Fox et al. ("Fox"). These rejections are respectfully traversed.

III. Incomplete Office Action

The Office Action mailed on April 5, 2007, appears to be incomplete, or otherwise confusing, inasmuch as some of the claims appear to be rejected, but the grounds of rejection are not explicitly identified. Specifically, pages 6-9 of the Office Action discuss claims 7-10 and 15 with regards to various references. The Office

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Action, however, does not explicitly provide a ground of rejection of these claims. For purposes of responding to the outstanding Office Action, it is presumed that these claims were intended to be rejected under 35 USC §103(a) as being unpatentable over the references discussed in the Office Action. Further, claim 16 is indicated as being allowable provided that it is rewritten in independent form. Applicants note, however, that claim 16 is already presented in independent form.

IV. Rejections under 35 USC §103

Claims 1, 3, 5, 6, 11, 14, and 24 were rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller. Regarding independent claim 1, the Office Action alleges that Stromme discloses an apparatus for handling sheets that comprises a movable sheet transfer member that has a transfer surface contactable with one of the sheets so that the sheet is transferred by the sheet transfer member. The Office Action further alleges that Stromme discloses a sheet supporting surface area that is contactable with one of the sheets transferred by the sheet transfer member, and an information reader arranged in the evaluation region to face one of the sheets transferred by the sheet transfer member. In particular, the Office Action alleges that when seen in a direction perpendicular to a thickness direction of one of the sheets and a transfer direction of the one of the sheets, the sheets are ejected into the evaluation region in a tangential line after leaving the boundary point of the transfer surface on the transfer member from which the sheet starts to separate away from the transfer surface in a straight line above the guide member in passing through the information evaluation region. Applicants respectfully disagree.

As currently amended, independent claim 1 defines an apparatus for handling sheets that comprises:

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a sheet transfer member being movable, and having a transfer surface contactable with one of the sheets so that the one of the sheets is transferred by the sheet transfer member,

a sheet supporting surface area being contactable with the one of the sheet transferred by the sheet transfer member, said sheet supporting surface extending to be contactable with the one of the sheet between the transfer surface and the information reading point, and

an information reader arranged to face to the one of the sheet transferred by the sheet transfer member and having in an information reading range including an information reading point, in which reading range an information is securely readable from the one of the sheets,

wherein as seen in a view direction perpendicular to a thickness direction of the one of the sheets and a transferred direction of the one of the sheets transferred by the sheet transfer member, a tangential line of a boundary point of the transfer surface of the sheet transfer member from which boundary point the one of the sheets starts to separate away from the transfer surface extends in a side area of an imaginary straight line passing the information reading point and the boundary point, which side area including the sheet supporting surface area; and

wherein the tangential line intersects the sheet supporting surface area as seen in the view direction to press the one of the sheets against the sheet supporting surface area.

According to independent claim 1, the apparatus includes a sheet transfer member that is capable of being moved and includes a transfer surface that can come into contact with one of the sheets such that the sheet can be transferred by the sheet transfer member. A sheet supporting surface area extends such that it is contactable with the sheet between the transfer surface and an information reading point. The apparatus also includes an information reader that is arranged such that it faces the sheet being transferred and also has an information reading range that includes the information reading point. According to independent claim 1, when viewed in a direction perpendicular to the thickness direction of one of the sheets and the direction that it is being transferred by the sheet transfer member, a tangential line of the boundary point of the transfer surface of the sheet transfer

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member from which the sheet starts to separate away from the transfer surface extends in a side area of an imaginary straight line passing the information reading point and the boundary point with the side area including the sheet supporting surface area. Furthermore, the tangential line intersects the sheet supporting surface area as seen in the view direction to press the one of the sheets against the sheet supporting surface area.

The Office Action alleges that the combination of Stromme and Keller discloses all of the features recited in independent claim 1. Page 3 of the Office Action further indicates that reasons are provided for sustaining the rejection of claims 5 and 6. Applicants' review of the Office Action, however, has not revealed the precise reasoning for rejecting claim 5. Additionally, independent claim 1 has been amended to further recite the limitation of claim 5. Applicants' review of Stromme and Keller has failed to reveal any disclosure, or suggestion, for "the tangential line intersects the sheet supporting surface area as seen in the view direction to press the one of the sheets against the sheet supporting surface area."

It is therefore respectfully submitted that independent claim 1 is allowable over the art of record.

Claims 3, 6-8, 10-12, 14, 15, and 17-20 depend, either directly or indirectly, from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

Independent claim 24 defines an apparatus for handling sheets that comprises:

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a sheet transfer member being movable, and having a transfer surface contactable with one of the sheets so that the one of the sheets is transferred by the sheet transfer member,

a sheet supporting surface area being contactable with the one of the sheet transferred by the sheet transfer member,

an information reader arranged to face to the one of the sheet transferred by the sheet transfer member and having in an information reading range including an information reading point, in which reading range an information is securely readable from the one of the sheets, and

a pneumatic blower for applying a pneumatic pressure to the one of the sheets in such a manner that the one of the sheets is urged by the pneumatic pressure to be pressed against the sheet supporting surface area.

According to at least one feature of independent claim 24, a pneumatic blower is used to apply pneumatic pressure to the sheet being transferred such that the sheet is urged to be pressed against the sheet supporting surface area. See Fig. 11 of the instant Disclosure.

Applicants' review of the cited references has failed to provide any disclosure or suggestion for such a feature. It is therefore respectfully submitted that independent claim 24 is allowable over the art of record.

Claims 7, 8, 10, and 15 appear to have been rejected under 35 USC §103(a) as being unpatentable over various cited references. As previously discussed, however, these claims depend from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1.

Independent claim 9 defines an apparatus for handling sheets that comprises:

a sheet transfer member being movable, and having a transfer surface contactable with one of the sheets so that the one of the sheets is transferred by the sheet transfer member,

a sheet supporting surface area being contactable with the one of the sheet transferred by the sheet transfer member,

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an information reader arranged to face to the one of the sheet transferred by the sheet transfer member and having in an information reading range including an information reading point, in which reading range an information is securely readable from the one of the sheets, and

a press member being opposed to the sheet transfer member in such a manner that the one of the sheets is allowed to be pressed between the sheet transfer member and the press member at a boundary point in a press direction,

wherein an imaginary straight line passing the boundary point in a direction perpendicular to the press direction intersects the sheet supporting surface area as seen in a view direction perpendicular to a thickness direction of the one of the sheets and a transferred direction of the one of the sheets transferred by the sheet transfer member.

According to some of the features of independent claim 9, a press member is provided that opposes the sheet transfer member in such a manner that the sheet is allowed to be pressed between the sheet transfer member and the press member at a boundary point in a press direction. Additionally, an imaginary straight line passing the boundary point in a direction perpendicular to the press direction intersects the sheet supporting surface area when viewed in a direction perpendicular to the thickness of the direction of the sheet and a transferred direction of the sheet transferred by the sheet transfer member.

According to Stromme, when seen in the viewed direction, the imaginary straight line passing the boundary point in the direction perpendicular to the press direction does not intersect the sheet supporting surface area. Rather, this line is parallel to the sheet supporting surface area. Additionally, Keller fails to disclose the sheet supporting surface area against the sheet which is being pressed.

The art of record clearly fails to provide any disclosure or suggestion for the features recited in independent claim 9.

It is therefore respectfully submitted that independent claim 9 is allowable over the art of record.

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Independent claim 21 defines an apparatus for handling sheets that comprises:

a sheet transfer member being movable, and having a transfer surface contactable with one of the sheets so that the one of the sheets is transferred by the sheet transfer member,

a sheet supporting surface area being contactable with the one of the sheet transferred by the sheet transfer member,

an information reader arranged to face to the one of the sheet transferred by the sheet transfer member and having in an information reading range including an information reading point, in which reading range an information is securely readable from the one of the sheets, and

a distance detector arranged to face to the one of the sheets so that a value changing in accordance with a change in distance between the one of the sheets and the information reader is measured by the distance detector,

wherein the information reader includes a light emitter for projecting a light to the one of the sheets and a light receiver for receiving the light reflected by the one of the sheets to read the information from the one of the sheets, and the light emitter is controlled in accordance with the value in such a manner that an intensity of the light emitted by the light emitter is increased in accordance with the increase of distance between the one of the sheets and the information reader.

According to some of the features of independent claim 21, a distance detector is arranged to face the sheet being transferred so that a value changing in accordance with a change in distance between the sheet and information reader is measured by the distance detector. Additionally, the information reader includes a light emitter that projects a light to the sheet and a light receiver for receiving the light reflected by the sheet in order to read the information from the sheet. The light emitter is also controlled in such a manner that an intensity of the light emitted therefrom is increased in accordance with the increase in distance between the sheet and the information reader.

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The Office Action appears to have completely disregarded the points raised in Applicants previous Remarks. Rather, the rejection independent claim 21 has been maintained based the same reasoning (i.e., verbatim copying of the text) set forth in the previous Office Action. As previously identified by Applicants, the arguments raised in the Office Action are completely unsubstantiated. While the Patent Office bears the initial burden of establishing a prima facie case of obviousness, the Examiner is still unable to even remotely identify where, in Fox, features such as a distance detector (as set forth in independent claim 21) are disclosed. As previously indicated, Fox fails to provide any disclosure or suggestion for a light emitter that can be controlled such that an intensity of the light being emitted is increased in accordance with an increase in distance between the sheet being transferred and the information reader, as recited in independent claim 21. This is a clear case of hindsight reconstruction. Additionally, the element which is allegedly disclosed by the reference does not exist, as evidenced by the failure to identify such element.

It is therefore respectfully submitted that independent claim 21 is allowable over the art of record.

Claims 10, 12, and 17-20 were rejected under 35 USC §103(a) as being unpatentable over various cited references.

These claims, however, depend from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1.

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V. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

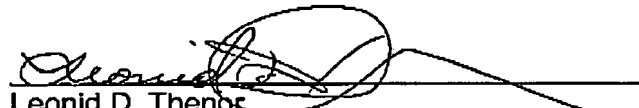
If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

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AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.43486X00).

Respectfully submitted,
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